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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,087	10/22/2003	Morton Curtis SR.	CUR-1001-US	4789
24923	7590	05/31/2006	EXAMINER	
PAUL S MADAN MADAN, MOSSMAN & SRIRAM, PC 2603 AUGUSTA, SUITE 700 HOUSTON, TX 77057-1130			JIANG, CHEN WEN	
			ART UNIT	PAPER NUMBER
			3744	

DATE MAILED: 05/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/691,087	CURTIS, MORTON	
	Examiner	Art Unit	
	Chen-Wen Jiang	3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-10 and 13-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-10 and 13-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4,9,13,16,17,19 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Bahel et al. (U.S. Patent Number 5,303,561).

Bahel et al. disclose a control system for heat pump having humidity responsive variable speed fan. The system comprises AC driven motor 30, fan 28, cooling coil 26, thermostat 45 and controller 46. The indoor fan speed is controlled based on humidity measurements, to produce a slower airflow when conditions are humid. Fig.10 discloses the minimum indoor speed at 60% or 70% and at 5 minutes delay. The active humidity control is accomplished by using the measured indoor temperature and humidity to compute the difference between the actual temperature and the apparent temperature based on the moisture content or humidity within the room. This difference is used to modulate the indoor airflow so that the system's moisture removal capability is altered. The relationship between the apparent temperature, the actual temperature and the relative humidity is shown in Fig. 5b. In the presently preferred embodiment, the indoor fan motor speed is not allowed to fall below 60% of the maximum speed whenever the indoor and outdoor temperatures are less than 75°. Fig.7 discloses the setup parameters comprise delays. Fig.9 discloses the mainline control and blower control are interconnected. Under the principals of inherency, if a prior art device, in its normal and usual operation, would necessarily perform

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the method claimed, then the method claimed will be considered to be anticipated by the prior art device. When the prior art device is the same as a device described in the specification for carrying out the claimed method, it can be assumed the device will inherently perform the claimed process. *Ir re King*, 801 F.2d 1324, 231 USPQ 136 (Fed. Cir. 1986).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 8 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bahel et al. (U.S. Patent Number 5,303,561) in view of Espinosa (U.S. Patent Number 4,757,694).

Bahel et al. disclose the invention substantially as claimed. However, Bahel et al. do not disclose the detail of speed control comprising a time delay circuit and a single pole, double throw delay. Espinosa discloses a time delay circuit and a single pole, double throw delay in the same field of endeavor for the purpose of speed control. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the apparatus of Bahel et al. with a time delay circuit and a single pole, double throw delay in view of Espinosa so as to control speed.

5. Claims 5 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bahel et al. (U.S. Patent Number 5,303,561).

In regarding to claims 5 and 15, it is noted that applicant recites a delay period and first speed selection. Bahel et al. disclose reduced first speed and the delay time depends on the

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temperature measurement. Upon a close review of applicant's specification, it appears that the claimed delay time does not have any criticality and/or lead to any new and unexpected results. Therefore, it would have been obvious to one of ordinary skill in the art to have selected the claimed delay time of 5 to 10 minutes since these particular selections provide no better or improved performance over that which is commonplace in the prior art.

6. Claims 18 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bahel et al. (U.S. Patent Number 5,303,561) in view of Hile (U.S. Patent Number 4,389,853).

Bahel et al. disclose the invention substantially as claimed. However, Bahel et al. do not disclose introducing outside air with damper. Hile discloses introducing outside air with damper in the same field of endeavor for the purpose of energy saving. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the apparatus of Bahel et al. with a damper in view of Hile so as to improve efficiency.

7. Claims 7,10,14,18,21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bahel et al. (U.S. Patent Number 5,303,561) in view of Obler (U.S. Patent Number 4,210,278).

Bahel et al. disclose the invention substantially as claimed. However, Bahel et al. do not disclose introducing outside air with damper and return air humidity sensor. Obler discloses a damper 118 and sensing mechanisms 62,64,66,68,70,72 and controller 30 in the same field of endeavor for the purpose of controlling temperature and humidity. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the apparatus of Bahel et al. with a damper and sensor in view of Obler so as to improve air quality.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chen-Wen Jiang whose telephone number is (571) 272-4809.

The examiner can normally be reached on Monday-Thursday from 8:00 to 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571) 272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Chen-Wen Jiang
Primary Examiner

